1AP20 ROS GEOTTE 17 FEB 2006

CLAIMS:

1. An apparatus for inoculating a biological substrate with cells comprising:

a container for receiving said substrate and a suspension of said cells;

first drive means for rotatably supporting said container about a first rotational axis; and

second drive means for rotatably supporting said first drive means about a second rotational axis whereby said container revolves around said second rotational axis while said container rotating about said first axis;

wherein said first and second rotational axes lie in mutually spaces apart planes and extend in different directions in said planes.

2. An apparatus for inoculating a biological substrate with cells comprising:

a container for receiving said substrate and a suspension of said cells;

first drive means for rotatably supporting said container about a first rotational axis;

second drive means for rotatably supporting said first drive means about a second rotational axis whereby said container revolves around said second rotational axis while said container rotating about

said first rotational axis;

wherein said first and second rotational axes extend neither in parallel nor intersecting with each other.

- 3. The apparatus according to claim 1 or 2 wherein said first and second rotational axes extend in angularly spaced apart directions defining approximately 90° about a center line that intersects parpendicularly both said first and second rotational axes.
- 4. The apparatus according to any one of claims
 1.3 wherein at least one of said first and second
 rotational axes is offset from the drive shaft of a
 mechanism for rotating said container or said first
 drive means.
- 5. The apparatus according to any one of claims 1-4 wherein said container is removably mounted in said first drive means.
- 6. The apparatus according to any one of claim 1-5 wherein said first drive means is removably mounted in said second drive means.
- 7. The apparatus according to any one of claims
 1.6 wherein said first and second drive means include
 their own control means for controlling the rotation of
 said container and said first drive means

independently from the other control means.

- 8. The apparatus according to any one of claims 1.7 wherein said first drive means transmit a driving force to said container via frictional contact between them.
- 9. The apparatus according to any one of claims
 1.8 wherein said second drive means transmit a driving
 force to said first drive means via frictional contact
 between them.
- 10. A method for inoculating a biological substrate with cells comprising the steps of:

receiving said substrate and a suspension of said cells in a container;

rotatably supporting said container in first drive means for rotation about a first rotational axis;

rotating said container about said first rotational axis and said first drive means about said second rotational axis whereby said container revolves about said second rotational axis while said container rotating about said first rotational axis;

wherein said first and second rotational axes lie in mutually spaced apart planes and extend in different directions in said planes.

11. A method for inoculating a biological substrate with cells comprising the steps of:

receiving said substrate and a suspension of said cells in a container;

rotatably supporting said container in first drive means for rotation about a first rotational axis;

rotatably supporting said first drive means in second drive means for rotation about a second rotational axis;

rotating said container about said first rotational axis and said first drive means about said second rotational axis whereby said container revolves around said second rotational axis while said container rotating about said first rotational axis;

wherein said first and second rotational axes extend neither in parallel nor intersecting with each other.

- 12. The method according to claim 10 or 11 wherein said first and second rotational axes extend in angularly spaced apart directions defining approximately 90° about a center line that intersects parpendicularly both said first and second rotational axes.
- 13. The method according to any one of claims 10.12 wherein at least one of said first and second rotational axes is offset from the drive shaft of a drive mechanism for rotating said container or said first

drive means.

- 14. The method according to any one of claims 10-13 wherein said container is removably mounted in said first drive means.
- 15. The method according to any one of claims 10-14 wherein said first drive means is removably mounted in said second drive means.
- 16. The method according to any one of claims 10.15 wherein said first and second drive means include their own control means for controlling the rotation of said container and said first drive means independently from the other control means.
- 17. The method according to any one of claims 10-16 wherein said first drive means transmit a driving force to said container via frictional contact between them.
- 18. The method according to any one of claims 10.17 wherein said second drive means transmit a driving forth to said first drive means via frictional contact between them.